Service Offerings

	Timesharing	Dedicated Processor	Geography	Differentiation with Advantis
Genix	95% $66.5 million	5% $3.5 million	Regional: midwest, but expanding nationally	Somewhat broader range of processing services
Power	60% $30 million	40% $20 million	National	Combined with support services
Martin Marietta	$100 million	(Systems operations type of contracts amounting to about $50 million)	National but clustered near processing sites	Follow-on to development services
SHL	$45 to $50 million in revenue from systems operation and processing. Most of this revenue is from U.S.		National	Combined with other services
Litton	$18 million	$17 million (includes systems operations business)	Clustered near 7 centers	Combined with professional services

YAD

	Transition Service		Relation with Parent	
	Services Offered	Midsized Services	Overall Parent Relationship	Additional Parent-driven Synergies
Genix	IBM mainframe, VAX, AS/400	As part of long term contract	Parent provides about 20% of business & funding	Telecomm and network
Power	Supercomputer, IBM mainframe, VAX	Part of application solution	Parent provides about 30% of business	Vertical market experience
Martin Marietta	IBM Mainframes	Ad hoc, if required	Parent SI business provides processing follow-on	Follow-on work; network
SHL	IBM mainframe, VAX, AS/400, HP	Part of application solution	SI business provides processing follow-on	Follow-on work
Litton	IBM mainframe and front ends	Ad hoc in response to customer need	Parent provides about 30% of business & follow-on	Follow-on work in specific technology; network

YAD

SOFTWARE

	SOFTWARE SUPPORTED	THIRD PARTY LICENSING	METHODS OF SELLING/CHARGING
GENIX	IBM; CUSTOMER, THIRD PARTY	COMSHARE LICENSEE	NO SEPARATE CHARGE FOR SYSTEMS SOFTWARE
POWER	THIRD PARTY VENDORS; CUSTOMERS; IBM	ACQUIRES SOFTWARE NEEDED	NO SEPARATE SOFTWARE CHARGE
MARTIN MARIETTA	VENDOR DEVELOPED; IBM	SUBCONTRACTOR-SUPPLIED	NO SEPARATE SOFTWARE CHARGE
SHL	VENDOR DEVELOPED; IBM	ACQUIRES IF NEEDED	WILL SUGGEST PROCESSING AND SI CONTRACTS TO MEET CLIENT NEEDS THAT COVER SOFTWARE COSTS
LITTON	VENDOR, CUSTOMER, THIRD PARTY VENDOR, IBM	HELPS IDENTIFY PRODUCTS NEEDED	BUNDLED INTO OVERALL CHARGES

YAD

Federal Activities

Genix	None
Power	30% of revenue but declining
Martin Marietta	80 % federal - Extensive DOD
SHL	5% federal now (more in past)
Litton	50% federal - longtime federal contractor

YAD

Charges for Services

	General Arrangements	Innovations	Fixed Price?
Genix	Resource usage	Will tailor contracts	No
Power	Resource usage (70%), also fixed price and cost plus	See "fixed price"	Yes, including initial fixed price followed by resource usage
Martin Marietta	Generally fixed price	None	Yes, generally
SHL	Resource utilization and fixed price	Bundle costs with SI	Yes, often
Litton	Generally fixed price	None	Yes, generally

YAD

Contracts

	Contract Flexibility	Time to Negotiate	Contract Negotiation Directions
Genix	Yes, within general parameters	Two to 12-15 (average of 3 to 6)	Long term relationships; shared processing; third party software
Power	Very flexible	2-3 months for renewals and up to 15 for new contracts	Longer term contracts; new clients
Martin Marietta	Not very flexible	Generally a year or more	More flexible to get commercial business; longer term contracts
SHL	Very flexible	A few months if follow-on; otherwise, 10-12 months	Longer term contracts; wider range of offerings
Litton	Not very flexible	3-4 months to over a year	More flexibility; longer term contracts

YAD

Cost Structure

	Hardware Generation	Lease/Purchase	Depreciation	Optimum Data Center Size
Genix	Mostly older	Purchase	4-5 years	Don't know (small)
Power	Somewhat older	Purchase	Mostly 5; some newer, over 5	Don't know (small)
Martin Marietta	Mostly current	Purchase	5-7 years	Not sure because of mix of work
SHL	Mostly current	Purchase	4-5 years for older; up to 7 years for newer	Unknown because of mix of work
Litton	Mixed	Purchase	7 years	Large centers (recently consolidated)

YAD

Staffing

	Personnel	Relative Cost	Own Staff Versus Third Party	Maintenance
Genix	350	Average	Own staff (including hires from clients)	TPM
Power	250	Below average	Own and some acquired staff. Have used, but don't rely on, third party	TPM
Martin Marietta	Total employees of MMIS are 6000. Will not subdivide	Average	Own and some acquired staff. Generally don't use third party	IBM, TPM
SHL	Can not be determined	Below average	Own and some acquired staff. Generally don't use third party	Mostly TPM
Litton	300	Average	Tend to use own staff	Mostly IBM

YAD

T/S vs Dart?

	Strengths	Weaknesses
Genix	• Close client relations • Improve client operations	• Limited processing services
Power	• Industry knowledge	• Industry knowledge • Downsizing
Martin Marietta	• Complex technical environments (mainframe)	• Federal orientation
SHL	• SI linkage • Complex technical environments (connectivity)	• Giving away processing to get SI work
Litton	• Broad range of experience	• Older, mainframe orientation

YAD

Overall Assessment

	Self-Perception	Overall Strategy	Future Direction
Genix	Leader in remote processing; cost competitive	Customer satisfaction	Networking; enter other regions
Power	High value-added	Add more support services	Networking; support services
Martin Marietta	High technical competence	Move into commercial sector	Commercial markets
SHL	Full solutions provider	SI and processing	Client/server technology
Litton	Full service provider	SI and processing	Improve technical capabilities; move more into commercial markets

YAD

Sales and Marketing

	Organization	Focus	Process
Genix	Direct sales force	Largely regional; weighted to manufacturing	Cold calls to determine need
Power	Direct sales force	Process manufacturing, utilities; weighted to Southwest; decreasing federal	Cold calls
Martin Marietta	Direct sales force; indirect sales through other functions	Largely federal; trying to shift	Largely responsive to RFP's
SHL	Geographic sales force; processing specialists	Few geographic or company limitations	Cold calls on general capabilities
Litton	Geographic sales force selling all services; processing specialists	Weighted toward federal, manufacturing and retail	Cold calls, particularly in target segments

YAD

MAY 1993

Profiles of
Capacity Services Competitors

INPUT

The Atrium at Glenpointe, 400 Frank W. Burr Boulevard, Teaneck, NJ 07666 201-801-0050

INPUT

Atrium at Glenpointe, 400 Frank W. Burr Blvd., Teaneck, NJ 07666 Tel. (201) 801-0050
Fax (201) 801-0441

May 13, 1993

Mr. Al Wright
Advantis
3101 W. Dr. M.L. King Drive
Tampa, FL 33607

Dear Al:

Attached are five copies of the report. They are stamped draft to indicate that we are more than happy to make changes and clarifications if necessary. Actually, as you can see, the information is quite complete -- every grid in the matrix is filled in.

You may want to look over the report first and ask questions before distributing it to the others. Let me know when a good time for the review meeting will be from your standpoint. Our schedules are fairly flexible for the rest of the month.

Both John and I found this project quite interesting and look forward to helping you in any way.

Sincerely,

Thomas O'Flaherty
Vice President

TOF:jb
Attachments

BACKGROUND AND INTRODUCTION

INPUT was engaged by Advantis to analyze competitors in the capacity services market. At a meeting in Tampa on March 16, 1993 INPUT was briefed on Advantis' plans and directions in this market as well as Advantis' assessment of its competitors.

As a result of this meeting it was agreed to analyze the following vendors:

- Genix
- Power Computing
- Martin Marietta
- SHL Systemshouse
- Litton

The topics to be covered in the outline on the next page were agreed to subsequent to the meeting.

INPUT interviewed a variety of staff within each vendor as well as drawing upon material and reports already in INPUT's possession.

The remainder of this report is organized as follows:

Chapter II: Summary Matrixes

Chapter III: More detailed information behind the summary matrixes

Chapter IV: The same summary information organized by vendor to provide a profile of each vendor

PROFILE CATEGORIES

A. Services Offered

1. **Overview** of services; comparison to Advantis, including

   - Timesharing offerings
   - Dedicated processor offerings
   - Differentiation with Advantis (including whether differences are positive or negative for Advantis)
   - Importance of geographic distance

2. **Transition services**

   - Specific targets (e.g., AS/400)
   - If offered, how are mid-sized services offered economically

3. **Relation of capacity services to other services**

   - Overall parent relationships
   - Synergies

4. **Software**

   - Software offered (IBM, third party)
   - Third party license arrangements
   - Method(s) for selling to/charging customers

5. **Federal activities** (summary)

B. Pricing

1. **General**

   - How are customers charged?
   - Are there innovative charging arrangements?
   - How fixed are prices?

2. **Terms and conditions**

   - How flexible or standardized are contracts?
   - How long does it take to negotiate?
   - What direction are contracts going in?

3. **Software**

   - Included in price or priced separately?

C. Cost structure

1. **Hardware**

   - Current vs. obsolete technology used?
   - Lease vs. purchase?
   - Depreciation period
   - Optimum data center size

2. **Personnel**

   - Relative cost (especially to Advantis)
   - Use of won staff vs. third party (for operations, other services)

3. **Maintenance** (IBM vs. TPM)

D. General Information

1. **Organization structure**

2. **Competitive overview**

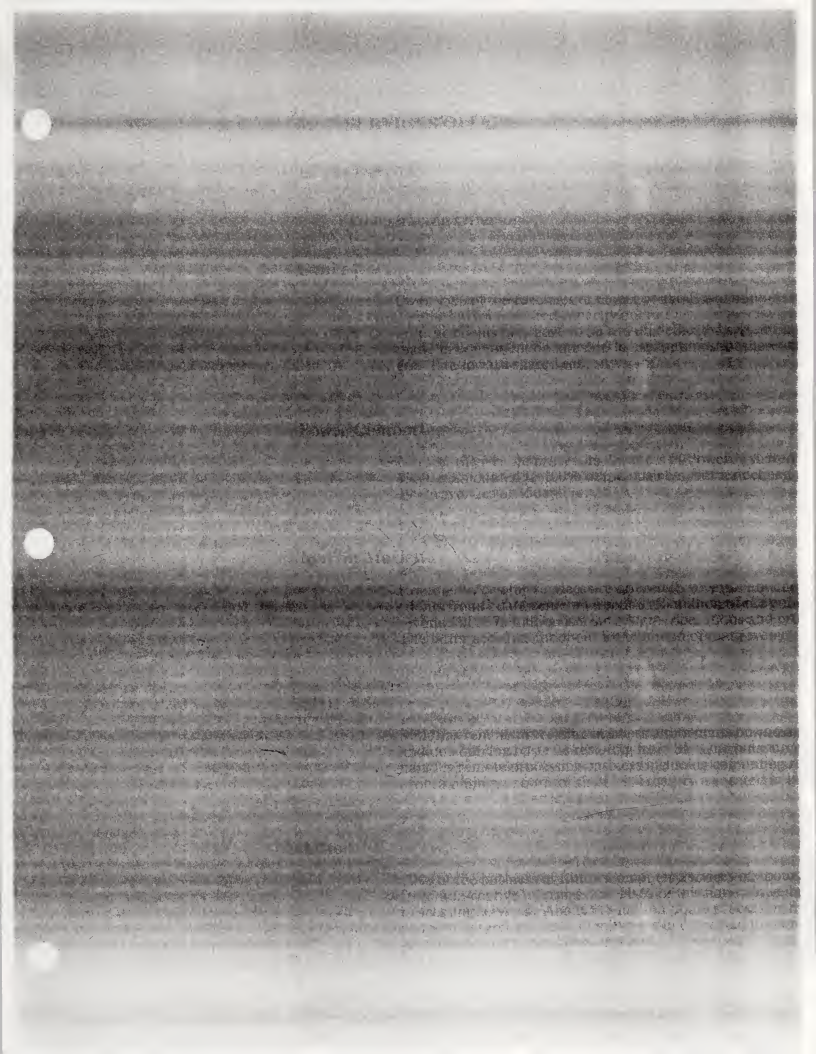
   - Strengths and weaknesses
   - Company's perception of itself
   - Overall strategy
   - Future directions

E. Sales and Marketing

1. **Organization and Structure**

2. **Focus** (geography, industry, platform, etc.)

3. **Sales process** (prospect identification, etc.)



A. SERVICES OFFERED

1. Overview

- **Timesharing Offerings**

Genix

Over 95% of the revenues of Genix or about $70 million is from remote computing using shared capacity operations. Some new business or the work of large clients may have to be run on dedicated systems until changes are made in equipment or software in use, but most of these customers will gravitate toward shared capacity work.

Power Computing

Most of the remote processing business of Power is shared processing. In 1989, it amounted to 100% of the business, but it declined to about 60% of 1992 revenues of $50 million.

Martin Marietta

Remote processing services are offered to government and commercial clients from 3 data centers. About $150 million of the annualized MMIS revenue of $675 million is from systems operations and processing services. The latter accounts for about $100 million of that revenue.

SHL

SHL has remote processing business although its business emphasis is on SI and outsourcing business resulting from SI. One outsourcing center that handles remote processing business including computing resources and programming support for the U.S. Treasury is located in Houston.

Litton

70% of the business of Litton Computer Services of about $100 million is from non-captive offerings, and 50 % of this non-captive business is in processing services. About $18 million of the processing business is in shared processing services, and $17 million is in dedicated processing. LCS also provides SI and professional services.

- **Differentiation with Advantis**

Genix

Genix supports a greater range of products and services under remote computing or shared processor arrangements than Advantis does. For instance, Genix supports VSE on both and provides LAN, WAN and network capabilities under shared processing arrangements. Genix also provides service on mid-range computers including AS/400, DEC, Tandem and Concurrent under shared processing arrangements.

Power Computing

Power seems more concerned with support services than Advantis. It offers a number of services in association with remote computing including a unique quality assurance program as well as alliances that can aid with applications design, implementation and management. Professional services will be offered shortly. Power also concentrates more attention on certain vertical markets than Advantis does.

Martin Marietta

Most of the remote processing and systems operations services which MMIS offers have been the outgrowth of complex development projects such as the simulation system for the National Test Facility.

SHL

SHL projects the image of handling more than processing services. It handles systems software, programming support, consulting and network services for clients. Many of the projects that result in processing work also require systems development or SI. However, SHL is also prospecting for work that is essentially processing.

Litton

A wide range of professional services is offered to clients, and work is primarily sought that will involve both the use of professional services and processing.

- **Dedicated Processor Offerings**

Genix

Genix claims that there is only a small amount at this time, 2 to 5 %, but the company does offer dedicated processors if interest arises.

Power Computing

The dedicated processor business of Power, about 40% of remote processing business in 1992, is concentrated in specific functions and industries, particularly process manufacturing and utility operation.

Martin Marietta

The work that MMIS does which involves equipment dedicated to a singe client is generally a facility management (or systems operations) arrangement which is provided at a client's site or where the client wants to be located.

SHL

Most of SHL's dedicated processor contracts involve a set of hardware, telecommunications and systems software capabilities that SHL is providing to support specific customer applications. These include a center to support a group of hospitals and processing services to support the business applications of 3 aerospace divisions of a U.S. manufacturer.

Litton

Dedicated processing is a mode of service from LCS centers in which capabilities are devoted to a specific customer. Specific contract awards in the past have also called for systems operations at client sites.

- **Importance of Geographic Distance**

Genix

Most of the business of Genix is with clients that are in the same region that Genix is in. The nationwide relationship with Heinz is based on initial business in the same region. Business has expanded recently into CA and New England.

Power Computing

Power provides remote computing over a much wider geographic area than Genix, for example, does. Its history of almost 30 years in the information services business versus a business history of about 10 years for Genix may be partially responsible for this.

Martin Marietta

MMIS can make use of data centers on the East coast, in Florida and in Western states as well as extensive network capabilities. Distance is no problem according to Martin Marietta, but its clients are grouped to a great extent close to its processing sites.

SHL

SHL is ready to compete for contracts at any location and will be innovative in terms of acquiring or setting up centers. The center in Houston was acquired from another company to respond to possible opportunities, and operations from PA were moved there to help support it.

Litton

Network capabilities including a T-1 backbone supports distant users, however, many of LCS clients including federal government customers are near the 7 LCS processing locations. Four of these sites support air force work, one is in Washington, DC supporting federal government work, and the other two are the Eastern and Western regional centers in Reston, VA and Woodland Hills, CA.

A. SERVICES OFFERED

2. Transition Services

- **Specific Targets**

Genix

In addition to IBM mainframe business, Genix makes individual arrangements with clients that provides for the availability of mid-range computers including the AS/400 at Genix sites.

Power Computing

Power has a range of computers available (Cray and Cyber super computer, IBM mainframe and DEC and other minicomputers) that are suited to its target industries, process manufacturing (including oil and gas production) and utilities.

Martin Marietta

MMIS is principally oriented to IBM mainframes and has one of the largest IBM installations in the US in Orlando, Florida. However, MMIS claims that it is prepared to supply almost any kind of transition service for work from other computers.

SHL

SHL is willing to bid for IBM mainframe, mid-range (DEC, IBM, HP or other) and other business. The emphasis is on solving problems for clients rather than equipment involved.

Litton

LCS offers IBM mainframe computing environments primarily although front end processors and customized interfaces provide access to any customer workstations.

- **How are Midsized Services Offered Economically?**

Genix

Since many of the arrangements that Genix is making are for long term situations, Genix is able to offer mid-range capabilities economically.

Power Computing

They are aimed at specific applications in process manufacturing and utilities and are part of a program of serving clients which makes it possible to conclude arrangements that will make it economic to provide midsized services.

Martin Marietta

If midsized services were required by a contract, MMIS would assume that the need would justify an economic arrangement. Not much is offered at present.

SHL

Since the emphasis is on solving problems, SHL feels that it can obtain contracts for service that will cover costs. This has been done, but there is not much work of this type underway, at present.

Litton

Midsized services such as the use of Tandem computers in some military systems is arranged for by the contract which ensures profitable midsized services.

A. SERVICES OFFERED

3. Relation of Capacity Services to Other Services

- **Overall Parent Relationships**

Genix

In addition to providing services to its parent (about 10% of revenue), Genix has obtained and grown work with companies in the same general region based on the good relations of its owner (Michigan Consolidated Gas Company) with other companies and its reputation with early clients. Clients tend to increase business and take advantage of the IS capabilities and research of Genix and its parent.

Power Computing

Power is a division of Babcock and Wilcox (which is owned by McDermott International, Inc.). It provides much of the information systems needs of Babcock and Wilcox.

Martin Marietta

The remote processing business makes use of the data centers and equipment which MMIS has available. It also results from some of the contracts of the parent which call for the operation of systems that have been developed to meet a client need.

SHL

SHL is looking for opportunities for SI contracts that may or may not involve remote processing. When opportunities arise, particularly for large scale services, SHL responds rapidly.

Litton

30% of services including processing, professional services and SI are provided to internal, Litton groups. The professional services and SI capabilities were originally developed to fulfill military contracts.

- **Synergies**

Genix

Has developed capabilities through supporting IS needs at parent. Has used parent's good will and service business contacts (gas company) to gain business. Also, Genix has added specialized processing of output and telecommunications and network monitoring/control capabilities for some clients, including a subsidiary of its owner. Genix has found that these capabilities have been of interest to manufacturing, service and other clients.

Power Computing

Power Computing has gained the knowledge of the nuclear power generation, utility operation and the oil and gas industries as well as systems and software products used in those industries from its parent, Babcock and Wilcox. These capabilities have been instrumental in gaining business.

Martin Marietta

Experience that MMIS has gained from large federal government or commercial contracts can result in capabilities that can be used to obtain other contracts for air traffic or EDI jobs, for instance, that can involve processing work.

SHL

SHL has found opportunities to engage in remote processing in a number of cases as a result of the company's ability to develop solutions to the business problems of prospects.

Litton

The work which has been undertaken on military contracts including use of systems engineering, modeling and simulation, integration, CASE, client/server technology, optical disk equipment, and other areas of IT are useful in obtaining contracts with the government and commercial organizations to develop application systems and provide operational support for them.

A. SERVICES OFFERED

4. Software

- **Software Offered (IBM, Third Party)**

Genix

Genix offers IBM systems software products and helps clients take advantage of network and other new technology, but application software products that are used are developed by in-house client groups for about 45% of client workloads and by third parties for the remainder.

Power Computing

Client owned, Power owned and third party application software products have been used in remote processing work. Client software has increased from 25% of the total in 1989 to about 40% in 1992. Third party software products have decreased from 70% to about 40% in the same period. Power has expanded the use of its software products from 5% to 20% in the same period. A small part of the application software products in the third party category are reported to be from IBM.

Martin Marietta

Most of the software products used on jobs are developed by MMIS. Third party products could be obtained and used if desirable.

SHL

Much of the application software utilized in processing contracts has been developed by SHL for its clients. System software products of hardware vendors have also been offered.

Litton

LCS makes use of its own as well as IBM and third party software products. LCS has an extensive library of tools, DBMS, financial software products and application products for health care, manufacturing and other industries.

- **Third Party License Arrangement**

Genix

Genix offers the EIS products of Comshare, one of its clients, to other clients under a licensing arrangement. Genix does not have licensing arrangements for the application products that its clients utilize as noted above.

Power

If clients are using or plan to use third party software products or development work, Power will cooperate in supporting that relationship. Agreements can be concluded to obtain and run third party software by Power, which would generally involve a contractual alliance between the third party vendor and Power.

Martin Marietta

Arrangements have been made with subcontractors to have them develop or supply software products.

SHL

When necessary, SHL has obtained licensing arrangements for some third party software products such as DBMS products or accounting software products.

Litton

LCS aids clients by negotiating with third party vendors to obtain software products that would be needed to meet systems objectives.

- **Methods for selling to/charging customers**

Genix

Work with systems software products including network products that is required to run work is charged for on a separate, professional services basis. Use of systems software products is included in the resources charged to customers.

Power Computing

Over 70% of Power revenues come from resource utilization contracts even when third party application systems are used according to Power Computing.

Martin Marietta

The cost of developing and running third party software is bundled into charges to clients.

SHL

When solutions are proposed that use software products of various parties, SHL suggests the arrangements that will be used for the software products.

Litton

Third party software products are arranged for and incorporated into LCS charges.

A. SERVICES OFFERED

5. Federal Activities (Summary)

Genix

Genix revenues are 100% commercial in the sense that they include no federal business. Revenues are obtained from state government contracts, however.

Power Computing

Business from federal sources still amounts to a sizable amount of revenue (about 30%) although it is only growing at a rate of 10% while commercial business is growing at a rate of 30%. About 40% of federal business is long term (5 to 8 years) while 10% of commercial business is for that period.

Martin Marietta

Just as in other Martin Marietta activities, there is interest in federal business and groups devoted to federal targets. In the case of the Information Systems Group, there are offices devoted to civil and defense business. From around 20% of business in 1992, non defense business is targeted to increase to over 60% in 1997.

SHL

Revenues from the US federal government have accounted for around 5% of SHL revenues in the recent past, and much more about five years ago. In 1991, a contract from the Postal Service for $270 million over an 11 year period was awarded. A relatively small amount of systems operations work is involved in the Postal Service and other federal contracts. The major focus of these jobs is on systems integration work.

Litton

About 50% of non captive work is for the federal government. This includes development as well as processing work. Litton has been a government contractor for over 30 years and has been a major contributor to sophisticated air force systems for over 20 years. LCS is currently the prime contractor for the US Air Force Reliability and Maintainability Information System (REMIS).

B. Pricing

1. General

- **How are customers charged?**

Genix

Genix charges all customers based on the individual contract negotiated with them. The contract charges are based chiefly on resource utilization considerations. Contracts are not negotiated based on fixed price, transaction volume count or cost plus margin formulas.

Power Computing

70% of customer revenue results from resource utilization contracts, and the balance of revenue is equally divided between (10% each) fixed price, cost plus predefined margin, and fixed price on an initial basis changing to resource utilization.

Martin Marietta

Remote processing charges are fixed price in general based on an analysis of the use of resources and services.

SHL

SHL charges some clients for systems operations and processing work on a fixed price basis and some on a use of resources basis that reflects utilization as well as the total equipment involved.

Litton

Charges for shared or dedicated processing are almost entirely fixed price arrangements for use of specified resources both in federal government and commercial situations.

- **Are there innovative charging arrangements?**

Genix

Genix is prepared to negotiate each contract on a different basis which provides the opportunity for innovative contracts.

Power Computing

One of the pricing arrangements, initial fixed price changing to resource utilization, is felt to be innovative.

Martin Marietta

Not to any extent at present. Martin Marietta's charges are based mainly on its experience with government business.

SHL

SHL states that they have negotiated innovative arrangements in order to win contracts but will not provide details. INPUT believes the innovation in charging for processing work is attempted to be offset with charges for development work, but that these charges are not always sufficient.

Litton

Charging arrangements are not innovative in general.

- **How fixed are prices?**

Genix

Prices are kept in a fairly consistent relationship and are predictable for clients. Each contract is negotiated on an exception basis and can be different from other contracts.

Power Computing

Initial fixed price changing to resource utilization allows for flexibility in the pricing of jobs.

Martin Marietta

Prices tend to be close to fixed, although there have been some variations in what is charged for to win business. For instance, charges may not be applied to certain software.

SHL

Some clients have contracts with standard types of pricing that are relatively fixed, but others are priced on bases that can't be compared (i.e., where SI and processing are bundled).

Litton

Relatively fixed

B. PRICING

2. Terms and Conditions

- **How flexible or standardized are contracts?**

Genix

Contracts are relatively similar, but they can all have differences. Flexibility is achieved by negotiating each contract separately. Flexibility is needed due to the willingness of Genix to accommodate some non IBM computers (Amdahl, Hitachi, Tandem, DEC, Concurrent) and various network alternatives.

Power Computing

Contracts are somewhat flexible or customized to accommodate the various types of arrangements that Power has concluded. They include arrangements to take over the entire business of data centers, support the transition to a workstation environment and provide remote processing capabilities for specified functions.

Martin Marietta

Contracts tend to be very similar although they are not fully standardized.

SHL

Overall, SHL is very flexible although they can present very standardized types of contracts for systems operation work for government bodies or for situations that involve principally remote processing work such as that done for Spectrum Healthcare or Native American Consulting, Inc.

Litton

Contracts are almost all standard. The heavy involvement of LCS with military contracts has been a strong influence in using standard contracts.

- **How long does it take to negotiate?**

Genix

It can take from two to 12 or 15 months. The average time is three to six months for a completed contract. Genix will start conversion work before all formalities have been completed.

Power Computing

Some contracts, particularly expansions of service or renewals, can take two to three months. Other contracts can take many months (10 to 15).

Martin Marietta

It often takes 12 to 14 months although there are some shorter ones.

SHL

Systems operations work that is part of SI contracts has been concluded in three to four months, but contracts that chiefly involve systems operations work can take much longer, up to 10 or 12 months.

Litton

Three or four months to over a year.

- **What direction are contracts going in?**

Genix

Contracts are moving toward longer term relationships (80% are five to eight years) and greater use of shared processing and third party software during the last three years. Over 80% of new contracts come from existing clients.

Power Computing

More contracts are being obtained for 3 to 4 year periods, and more are the result of sales activity with new clients than was the case 2 to 3 years ago.

Martin Marietta

They will become somewhat more flexible since there is more commercial business. They will also be for longer periods of time.

SHL

Contracts are for longer periods of time on the average. Systems operations services are also apt to involve more capabilities such as network management and desktop services as well as operation of applications and platforms.

Litton

Both military and commercial contracts are for longer periods of time. Also, there is pressure to conclude more flexible contracts in terms of the services involved and pricing arrangements.

B. PRICING

3. Software

- **Included in price or priced separately?**

Genix

Arrangements for use of systems software products are included in the contractual price although separate charges are incurred for any work required to utilize systems software. Application software is provided by third parties or supplied by clients so no charge is involved.

Power Computing

Systems software products and use of third party developed software products are covered in resource billing.

Martin Marietta

Operational cost would depend on operational considerations including the time to run various software products. There could also be charges for work that was required to implement or modify software products.

SHL

Pricing for systems software is generally included in the price, and in some contracts where the application software systems are supplied by the client, the charge for operating and supporting the application software is included in the operational charges. Where application software products are developed by SHL, there could be separate charges for operation of these products.

Litton

Generally, included in the price.

C. Cost Structure

1. Hardware

- **Current Versus Obsolete Technology Used?**

Genix

Older technology in many cases. Up to a generation old in some situations.

Power Computing

Slightly old hardware products are in use in general.

Martin Marietta

Technology is relatively current, but some older technology is in use.

SHL

Most of the equipment that is involved in SHL SI contracts is current technology, but some of the systems operations and processing contracts has involved the use of equipment that is older, perhaps a generation older in a few instances.

Litton

Technology includes latest IBM mainframe units (E/S 9121-320) as well as older 3090s (600J and 600S).

- **Lease Versus Purchase**

Genix

Over 90% of the equipment in use has been acquired by Genix.

Power Computing

Most of hardware products in use are purchased.

Martin Marietta

Much of the equipment in use has been purchased.

SHL

Most of the equipment in use in processing services has been acquired by SHL.

Litton

Generally purchased.

- **Depreciation Period**

Genix

For mainframe equipment, most is being depreciated over 4 to 5 years since it tends to be older. Some is a generation old.

Power Computing

Most equipment is depreciated over no more than five year although some new equipment has been depreciated over a longer period of time.

Martin Marietta

Much of it is depreciated between 5 and 7 years.

SHL

Acquired equipment is depreciated over periods of 4 to 5 years for older equipment and for up to 7 years on newer equipment.

Litton

7 years. Shorter periods under consideration.

- **Optimum Data Center Size**

Genix

Does not have an opinion based on past experience.

Power Computing

This factor is not dealt with since Power is running only 2 data centers.

Martin Marietta

Cannot make a determination due to the different mix of work at centers. Large centers do have economics of scale according to MMIS.

SHL

Since there are many different types of processing services and clients, there is no optimum size for SHL.

Litton

Have recently consolidated CA centers. Larger centers offer chances for more economy according to LCS.

C. COST STRUCTURE

2. Personnel

Genix

350

Power Computing

250

Martin Marietta

Total employees of MMIS are around 6000.

SHL

Number of personnel involved in processing could not be obtained.

Litton

1000 who handle all LCS work including captive work and SI and professional services contracts. About 300 handle processing work or have responsibilities associated with processing.

- **Relative Cost**

Genix

Pay about average salaries in outsourcing industry, but below Advantis.

Power Computing

Power estimates that its costs are slightly below average.

Martin Marietta

Near average for the industry.

SHL

SHL pays below average according to contacts in the firm involved with systems operations assignments.

Litton

About average according to LCS.

- **Use of Own Staff Versus Third Party**

Genix

Own staff and staff taken over from clients are used in both operations and other services.

Power Computing

Some of staff taken over from clients is used. Third party staff is not relied upon.

Martin Marietta

Some of the staff taken over from clients has been utilized. Generally use own staff and not third party.

SHL

Many of the processing jobs involve running newly developed work such as at Spectrum Healthcare where SHL staff is used. In situations such as at First City Trust, some of the staff transferred from clients was used. Third party is generally not relied upon.

Litton

Tend to use own staff

C. COST STRUCTURE

3. Maintenance (IBM versus TPM)

Genix

Use TPM

Power Computing

TPM

Martin Marietta

Use both IBM and TPM.

SHL

SHL uses TPM in many situations and IBM in some cases.

Litton

IBM handles much if not all.

D. GENERAL INFORMATION

1. Organization Structure

Genix

There are sales/marketing; operations; technical support; marketing, product planning and pricing; and financial groups reporting to management.

Power Computing

The organization has the following units:

Sales
Systems and Network Operations
Design and Develop.(Applications and Network)
User Support
Administration

Martin Marietta

The information services vice president has offices reporting to him that handle business development and management as well as technical operations, human resources, and a general counsel. There are also four groups devoted to handling specific projects such as Housing and Urban Development, Civil Systems and the National Test Bed.

SHL

SHL has organizational offices devoted to Strategic Market Services, Strategic Technology Services, and Computing and Network Services, all of which report to corporate management. The first of these is devoted to industry markets of SHL. The second is devoted to the network capabilities, methods and alliances that SHL utilizes to serve clients. The third is in charge of the operational offices and facilities in the countries where SHL offers services as well as all outsourcing and systems operations services.

Litton

LCS is a division of Litton Industries with sales, industry application, systems engineering, technical support, data center operation, customer support, contract administration and financial units.

D. GENERAL INFORMATION

2. Competitive Overview

- **Strengths and Weaknesses**

Genix

Strengths are close relations with clients; ability to improve the operation and network usage of clients through better use of systems software products and re-engineering; the introduction of other new technology to aid clients; and flexibility in accommodating the unique processing needs of clients. There could be a weakness in not being prepared for types of outsourcing that would involve client/server technology at client sites.

Power Computing

Strengths include the familiarity and background that Power has in certain industry applications as well as the relationship with its parent companies that can help the company to stay current in its target industries. The quality program which Power has, that has been approved by the Nuclear Regulatory Commission but which can be used in a number of other industries, is an example of its strength.

The company's limited knowledge of some other vertical markets such as finance and insurance and its investment in super-computing and other technology are risks if not weaknesses. Also, Power does not seem to be planning sufficiently for the downsizing and use of client/server systems that are taking place in its target industries or new markets.

Martin Marietta

Martin Marietta's strengths are in handling complex technical projects, but it has a weakness in terms of the limited work that it has done in the commercial field.

SHL

In systems operations work, one of the strengths of SHL is its ability to participate in SI or other work that can lead to processing contracts. Other strengths are aggressive pricing and the ability to deal with complex equipment situations such as networks and client/server technology connected to mainframes or minis where support services as well as computer operations will be required. There could be weaknesses in covering costs in some bids as well as a dilution of strength in covering a variety of needs.

Litton

Strengths include experience in processing business, continuing federal business and technical capabilities. There is a recognized weakness in not being able to be as flexible as newer companies in the processing business such as Genix or SHL.

- **Company's Perception of Itself**

Genix

Genix feels that it is one of the leaders in offering systems operations services from a remote point. It feels that it can help clients to save money as well as improve their operations. It also feels that it can offer flexibility in handling work as well as in contractual arrangements.

Power Computing

Power perceives itself to be a high level remote processing capability that can profitably expand its services into new areas of information services and new markets.

Martin Marietta

Martin Marietta feels that it has considerable technical competence in areas such as image processing, process re-engineering, life cycle modeling, rapid prototyping, computer aided software tools and other areas of technical importance. Federal orientation can make significant expansion into the commercial market difficult.

SHL

SHL feels that it is a leader in customizing the application of new IT to meet client problems. It also feels that customers look to SHL to provide a unique range of services and re-engineer their business processes when necessary to take advantage of IT.

Litton

LCS views itself as a vendor of a range of information technology services including processing that has both business and technical competence based on lengthy experience in the IT business. LCS does not perceive itself as mainly a competitor for processing business.

- **Overall Strategy**

Genix

Improve capabilities for clients through cooperative relationships on day to day as well as long range planning so that customer satisfaction is kept at a high level. This aids in achieving renewals and also attracting new clients.

Power Computing

Add services such as more professional services support that can increase revenue from present clients and expand penetration of the commercial market. Expand federal business through present arrangements where possible, but don't invest very much in expanded marketing for the federal market.

Martin Marietta

The company plans on using its technical strengths to move into commercial areas. The company will be trying to select companies and needs that represent value added opportunities for the exploitation of its capabilities.

SHL

Emphasize that SHL has the technological knowledge and methodology to meet all types of business needs in regard to the use of IT.

Litton

Seek government and commercial situations where the resources of LCS can be used to advantage. These could include contracts to develop systems that would require processing as well as opportunities to offer available processing resources and software products together with technical assistance to meet prospect needs.

- **Future Directions**

Genix

Expand network and other capabilities to improve client performance as well as to serve more remote clients. Improve ability to re-engineer client work and to bring clients the advantages of new technology. Expand geographic and industry coverage.

Power Computing

Expand in other areas of information services. particularly where network capabilities could be used.

Martin Marietta

Investigate and select more commercial targets where the capabilities of Martin Marietta will be of interest.

SHL

SHL is actively engaged in being on the leading edge of the deployment of client/server technology and open systems.

Litton

Will continue to improve technical capabilities to meet new IT needs. Will also explore more commercial opportunities to exploit capabilities such as imaging and extensive network service capabilities.

E. SALES AND MARKETING

1. Organization and Structure

Genix

There is a direct sales staff reporting to the VP of sales and marketing at Genix headquarters. The sales staff prospects in the major region of the firm's activity in the Midwest and is assigned to handle companies in other regions of the US who contact Genix or who appear to be good prospects.

Power Computing

Depend on a direct sales force for 80% of commercial business and on new contracts with existing clients for 80% of government business. There are sales offices in major cities and near Washington, DC to support sales and marketing.

National coverage is provided in the US although coverage is most intense in certain areas where sales is focused including Washington, DC.

Martin Marietta

As described in the prior section, there are business units devoted to various market segments located at Martin Marietta offices. These units and the business development function have direct sales forces to cover the market segments of interest.

In regard to coverage, Martin Marietta is attempting to respond to nationwide opportunities, but its combination of offices and presently selected markets dictate what can be effectively covered.

SHL

Sales are carried out from regional offices through direct sales activities aimed at prospects for systems operations and processing services as well as through sales activities aimed at SI contracts that could include systems operations work,

Litton

Direct sales activities for LCS are carried on from over 10 locations in the US including locations supporting military contracts.

E. SALES AND MARKETING

2. Focus (Geography, Industry Platform, Etc.)

Genix

There has been a degree of concentration on the Midwest geographic region and commercial (non federal) business, particularly steel makers and manufacturing in general. However, prospects have turned up from other areas of the country, and Genix has gained business in CA and New England.

Power Computing

Attention is focused on process manufacturing and utilities in the commercial sector. Attention is also given to government business, particularly to present customers. There is a concentration of business in the Southwest based on the location of processing capabilities in Texas, but business is also handled elsewhere.

Martin Marietta

Business has been chiefly focused on federal, defense business. Attention is now being paid to civilian agencies and some commercial business where the company's technological strengths would be of use. This has included state government business.

SHL

Sales of SI and processing in the US are carried on from about 10 regional offices. There are also regional offices in Mexico, South America, Canada and other countries. SHL would not feel limited in regard to industry or platform in regard to SI, systems operations or processing opportunities.

Litton

Sales work is carried on throughout the country, but particularly in the Washington, DC area and in CA near regional offices. Business is particularly sought from federal, manufacturing and retail chains based on past experience and available software products. IBM mainframe contracts are also of greatest interest although LCS would like to find opportunities to use its development, network, front end and other capabilities together with mainframe processing.

E. SALES AND MARKETING

3. Sales Process (Prospect Identification, Etc.)

Genix

The sales process has concentrated on large companies within the Midwest region, particularly those that have or could have contacts with existing clients, but the process now involves following up on inquiries on a nationwide basis. The first three months of the sales process generally involve providing information on Genix services and making presentations. When interest is shown, proposals are prepared and a process of negotiation begins which could take more than a year to conclude.

Power Computing

The first stage in the sales process involves reviewing lists of companies in target industries and contacting them as well as responding to requests for information about services. When either of these steps uncovers prospects, steps are taken to make a presentation on what Power Computing can offer and identify the work that could possibly be handled by Power. If the prospect is qualified as an opportunity, a proposal will be prepared and the prospect will be invited to visit a processing site. A meeting with decision makers at the prospect will be arranged to begin the negotiation process at the conclusion of the prior steps.

Martin Marietta

Contacts are initiated by the company's offices in response to requests for bids or information or in response to situations where the company's capabilities can be used effectively. Where organizations express interest in Martin Marietta presentations or a request for proposal is developed, the company states that it will prepare a highly responsive bid. These bids are the first step in the negotiating process that can end in the use of the company's capacity services.

SHL

SHL carries out prospecting for all services from its regional offices. Some prospecting is devoted to follow up from contacts as well as investigation of opportunities to submit bids. One of the prospecting activities is trying to develop interest in a presentation where SHL can discuss its strength in methodology and technology. In all sales activities, SHL focuses upon its ability to submit highly competitive bids.

Litton

Direct sales work is engaged in with likely prospects as well as in response to contacts from past clients or other organizations. LCS sales personnel will try to scope the needs and objectives of prospects with the aid of technical support personnel. Qualified or likely prospects are encouraged to visit LCS processing sites and have presentation on LCS capabilities. Proposals will be developed in response to RFP's or to the prospect's needs. Sales management will work with sales representatives to attempt to close situations.

A Services Offered

1. Overview

- Timesharing Offerings

  Over 95% of the revenues of Genix or about $70 million is from remote computing using shared capacity operations. Some new business or the work of large clients may have to be run on dedicated systems until changes are made in equipment or software in use, but most of these customers will gravitate toward shared capacity work.

- Dedicated Processor Offerings

  Genix claims that there is only a small amount at this time, 2 to 5 %, but the company does offer dedicated processors if interest arises.

- Differentiation with Advantis

  Genix supports a greater range of products and services under remote computing or shared processor arrangements than Advantis does. For instance, Genix supports VSE on both and provides LAN, WAN and network capabilities under shared processing arrangements. Genix also provides service on mid-range computers including AS/400, DEC, Tandem and Concurrent under shared processing arrangements.

- Importance of Geographic Distance

  Most of the business of Genix is with clients that are in the same region that Genix is in. The nationwide relationship with Heinz is based on initial business in the same region. Business has expanded recently into CA and New England.

2. Transition Services

- Specific Targets

  In addition to IBM mainframe business, Genix makes individual arrangements with clients that provides for the availability of mid-range computers including the AS/400 at Genix sites.

- How are Midsized Services Offered Economically?

  Since many of the arrangements that Genix is making are for long term situations, Genix is able to offer mid-range capabilities economically.

3. **Relation of Capacity Services to Other Services**

- Overall Parent Relationships

  In addition to providing services to its parent (about 10% of revenue), Genix has obtained and grown work with companies in the same general region based on the good relations of its owner (Michigan Consolidated Gas Company) with other companies and its reputation with early clients. Clients tend to increase business and take advantage of the IS capabilities and research of Genix and its parent.

- Synergies

  Has developed capabilities through supporting IS needs of parent. Has used parent's good will and service business contacts (gas company) to gain business. Also, Genix has added specialized processing of output and telecommunications and network monitoring/control capabilities for some clients, including a subsidiary of its owner. Genix has found that these capabilities have been of interest to manufacturing, service and other clients.

4. **Software**

- Software Offered (IBM, Third Party)

  Genix offers IBM systems software products and helps clients take advantage of network and other new technology, but application software products that are used are developed by in-house client groups for about 45% of client workloads and by third parties for the remainder.

- Third Party License Arrangement

  Genix offers the EIS products of Comshare, one of its clients, to other clients under a licensing arrangement. Genix does not have licensing arrangements for the application products that its clients utilize as noted above.

- Methods for selling to/charging customers

  Work with systems software products including network products that is required to run work is charged for on a separate, professional services basis. Use of systems software products is included in the resources charged to customers.

5. **Federal Activities (Summary)**

   Genix revenues are 100% commercial in the sense that they include no federal business. Revenues are obtained from state government contracts, however.

B. Pricing

1. General

- How are customers charged?

  Genix charges all customers based on the individual contract negotiated with them. The contract charges are based chiefly on resource utilization considerations. Contracts are not negotiated based on fixed price, transaction volume count or cost plus margin formulas.

- Are there innovative charging arrangements?

  Genix is prepared to negotiate each contract on a different basis which provides the opportunity for innovative contracts.

- How fixed are prices?

  Prices are kept in a fairly consistent relationship and are predictable for clients. Each contract is negotiated on an exception basis and can be different from other contracts.

2. Terms and Conditions

- How flexible or standardized are contracts?

  Contracts are relatively similar, but they can all be different as described above. Flexibility is achieved by negotiating each contract separately. Flexibility is needed due to the willingness of Genix to accommodate some non IBM computers (Amdahl, Hitachi, Tandem, DEC, Concurrent) and various network alternatives.

- How long does it take to negotiate?

  It can take from two to 12 or 15 months. The average time is three to six months for a completed contract. Genix will start conversion work before all formalities have been completed.

- What direction are contracts going in?

  Contracts are moving toward longer term relationships (80% are five to eight years) and greater use of shared processing and third party software during the last three years. Over 80% of new contracts come from existing clients.

3. Software

- Included in price or priced separately?

  Arrangements for use of systems software products are included in the contractual price, although separate charges are incurred for any work required to utilize systems software. Application software is provided by third parties or supplied by clients so no charge is involved.

C. Cost Structure

1. Hardware

- Current Versus Obsolete Technology Used?

  Older technology in many cases. Up to a generation old in some situations.

- Lease Versus Purchase

  Over 90% of the equipment in use has been acquired by Genix.

- Depreciation Period

  For mainframe equipment, most is being depreciated over 4 to 5 years since it tends to be older. Some is a generation old.

- Optimum Data Center Size

  Does not have an opinion based on past experience.

2. Personnel

350

- Relative Cost

  Pay about average salaries in outsourcing industry, but below Advantis.

- Use of Own Staff Versus Third Party

  Own staff and staff taken over from clients are used in both operations and other services.

3. Maintenance (IBM versus TPM)

Use TPM

D. General Information

1. Organization Structure

There are sales/marketing; operations; technical support; marketing, product planning and pricing; and financial groups reporting to management.

2. Competitive Overview

- Strengths and Weaknesses

  Strengths are close relations with clients; ability to improve the operation and network usage of clients through better use of systems software products and re-engineering; the introduction of other new technology to aid clients; and flexibility in accommodating the unique processing needs of clients. There could be a weakness in not being prepared for types of outsourcing that would involve client/server technology at client sites.

- Company's Perception of Itself

  Genix feels that it is one of the leaders in offering systems operations services from a remote point. It feels that it can help clients to save money as well as improve their operations. It also feels that it can offer flexibility in handling work as well as in contractual arrangements.

- Overall Strategy

  Improve capabilities for clients through cooperative relationships on day to day as well as long range planning so that customer satisfaction is kept at a high level. This aids in achieving renewals and also attracting new clients.

- Future Directions

  Expand network and other capabilities to improve client performance as well as to serve more remote clients. Improve ability to re-engineer client work and to bring clients the advantages of new technology. Expand geographic and industry coverage.

E. Sales and Marketing

1. Organization and Structure

There is a direct sales staff reporting to the VP of sales and marketing at Genix headquarters. The sales staff prospects in the major region of the firm's activity in the Midwest and is assigned to handle companies in other regions of the US who contact Genix or who appear to be good prospects.

2. Focus (Geography, Industry Platform, Etc.)

There has been a degree of concentration on the Midwest geographic region and commercial (non federal) business, particularly steel makers and manufacturing in general. However, prospects have turned up from other areas of the country, and Genix has gained business in CA and New England.

3. Sales Process (Prospect Identification, Etc.)

The sales process has concentrated on large companies within the Midwest region, particularly those that have or could have contacts with existing clients, but the process now involves following up on inquiries on a nationwide basis. The first three months of the sales process generally involve providing information on Genix services and making presentations. When interest is shown, proposals are prepared and a process of negotiation begins which could take more than a year to conclude.

Power Computing Co.

A Services Offered

1. Overview

- Timesharing Offerings

  Most of the remote processing business of Power is shared processing. In 1989, it amounted to 100% of the business, but it declined to about 60% of 1992 revenues of $50 million.

- Dedicated Processor Offerings

  The dedicated processor business of Power, about 40% of remote processing business in 1992, is concentrated in specific functions and industries, particularly process manufacturing and utility operation.

- Differentiation with Advantis

  Power seems more concerned with support services than Advantis. It offers a number of services in association with remote computing including a unique quality assurance program as well as alliances that can aid with applications design, implementation and management. Professional services will be offered shortly. Power also concentrates more attention on certain vertical markets than Advantis does.

- Importance of Geographic Distance

  Power provides remote computing over a much wider geographic area than Genix, for example, does. Its history of almost 30 years in the information services business versus a business history of about 10 years for Genix may be partially responsible for this.

2. Transition Services

- Specific Targets

  Power has a range of computers available (Cray and Cyber super computer, IBM mainframe and DEC and other minicomputers) that are suited to its target industries, process manufacturing (including oil and gas production) and utilities.

- How are Midsized Services Offered Economically?

  They are aimed at specific applications in process manufacturing and utilities and are part of a program of serving clients which makes it possible to conclude arrangements that will make it economic to provide midsized services.

3. **Relation of Capacity Services to Other Services**

- Overall Parent Relationships

  Power is a division of Babcock and Wilcox (which is owned by McDermott International, Inc.). It provides much of the information systems needs of Babcock and Wilcox.

- Synergies

  Power Computing has gained the knowledge of the nuclear power generation, utility operation and the oil and gas industries as well as systems and software products used in those industries from its parent, Babcock and Wilcox. These capabilities have been instrumental in gaining business.

4. **Software**

- Software Offered (IBM, Third Party)

  Client owned, Power owned and third party application software products have been used in remote processing work. Client software has increased from 25% of the total in 1989 to about 40% in 1992. Third party software products have decreased from 70% to about 40% in the same period. Power has expanded the use of its software products from 5% to 20% in the same period. A small part of the application software products in the third party category are reported to be from IBM.

- Third Party License Arrangement

  If clients are using or plan to use third party software products or development work, Power will cooperate in supporting that relationship. Agreements can be concluded to obtain and run third party software by Power, which would generally involve a contractual alliance between the third party vendor and Power.

- Methods for selling to/charging customers

  Over 70% of Power revenues come from resource utilization contracts even when third party application systems are used according to Power Computing.

5. **Federal Activities (Summary)**

   Business from federal sources still amounts to a sizable amount of revenue (about 30%) although it is only growing at a rate of 10% while commercial business is growing at a rate of 30%. About 40% of federal business is long term (5 to 8 years) while 10% of commercial business is for that period.

B. Pricing

1. General

- How are customers charged?

  70% of customer revenue results from resource utilization contracts, and the balance of revenue is equally divided between (10% each) fixed price, cost plus predefined margin, and fixed price on an initial basis changing to resource utilization.

- Are there innovative charging arrangements?

  One of the pricing arrangements, initial fixed price changing to resource utilization, is felt to be innovative.

- How fixed are prices?

  Initial fixed price changing to resource utilization allows for flexibility in the pricing of jobs.

2. Terms and Conditions

- How flexible or standardized are contracts?

  Contracts are somewhat flexible or customized to accommodate the various types of arrangements that Power has concluded. They include arrangements to take over the entire business of data centers, support the transition to a workstation environment and provide remote processing capabilities for specified functions.

- How long does it take to negotiate?

  Some contracts, particularly expansions of service or renewals, can take two to three months. Other contracts can take many months (10 to 15).

- What direction are contracts going in?

  More contracts are being obtained for 3 to 4 year periods, and more are the result of sales activity with new clients than was the case 2 to 3 years ago.

3. Software

- Included in price or priced separately?

  Systems software products and use of third party developed software products are covered in resource billing..

C. Cost Structure

1. Hardware

- Current Versus Obsolete Technology Used?

  Slightly old hardware products are in use in general.

- Lease Versus Purchase

  Most of hardware products in use are purchased.

- Depreciation Period

  Most equipment is depreciated over no more than five year although some new equipment has been depreciated over a longer period of time.

- Optimum Data Center Size

  This factor is not dealt with since Power is running only 2 data centers.

2. Personnel

250

- Relative Cost

  Power estimates that its costs are slightly below average.

- Use of Own Staff Versus Third Party

  Some of staff taken over from clients is used. Third party staff is not relied upon.

3. Maintenance (IBM versus TPM)

TPM

D. General Information

1. Organization Structure

The organization has the following units:

Sales
Systems and Network Operations
Design and Develop.(Applications and Network)
User Support
Administration

2. Competitive Overview

- Strengths and Weaknesses

Strengths include the familiarity and background that Power has in certain industry applications as well as the relationship with its parent companies that can help the company to stay current in its target industries. The quality program which Power has, that has been approved by the Nuclear Regulatory Commission, but which can be used in a number of other industries, is an example of its strength.

The company's limited knowledge of some other vertical markets such as finance and insurance and its investment in supercomputing and other technology are risks if not weaknesses. Also, Power does not seem to be planning sufficiently for the downsizing and use of client/server systems that are taking place in its target industries or new markets.

- Company's Perception of Itself

Power perceives itself to be a high level remote processing capability that can profitably expand its services into new areas of information services and new markets.

- Overall Strategy

Add services such as more professional services support that can increase revenue from present clients and expand penetration of the commercial market. Expand federal business through present arrangements where possible, but don't invest very much in expanded marketing for the federal market.

- Future Direction

Expand in other areas of information services. particularly where network capabilities could be used.

E. Sales and Marketing

1. Organization and Structure

Depend on a direct sales force for 80% of commercial business and on new contracts with existing clients for 80% of government business. There are sales offices in major cities and near Washington, DC to support sales and marketing.

National coverage is provided in the US although coverage is most intense in certain areas where sales is focused including Washington, DC.

2. Focus (Geography, Industry Platform, Etc.)

Attention is focused on process manufacturing and utilities in the commercial sector. Attention is also given to government business, particularly to present customers. There is a concentration of business in the Southwest based on the location of processing capabilities in Texas, but business is also handled elsewhere.

3. Sales Process (Prospect Identification, Etc.)

The first stage in the sales process involves reviewing lists of companies in target industries and contacting them as well as responding to requests for information about services. When either of these steps uncovers prospects, steps are taken to make a presentation on what Power Computing can offer and identify the work that could possibly be handled by Power. If the prospect is qualified as an opportunity, a proposal will be prepared and the prospect will be invited to visit a processing site. A meeting with decision makers at the prospect will be arranged to begin the negotiation process at the conclusion of the prior steps.

Martin Marietta Information Services

A Services Offered

1. Overview

- Timesharing Offerings

  Remote processing services are offered to government and commercial clients from 3 data centers. About $150 million of the annualized MMIS revenue of $675 million is from systems operations and processing services. The latter accounts for about $100 million of that revenue.

- Dedicated Processor Offerings

  The work that MMIS does which involves equipment dedicated to a singe client is generally a facility management (or systems operations) arrangement which is provided at a client's site or where the client wants to be located.

- Differentiation with Advantis

  Most of the remote processing and systems operations services which MMIS offers have been the outgrowth of complex development projects such as the simulation system for the National Test Facility.

- Importance of Geographic Distance

  MMIS can make use of data centers on the East coast, in Florida and in Western states as well as extensive network capabilities. Distance is no problem according to Martin Marietta, but its clients are grouped to a great extent close to its processing sites.

2. Transition Services

- Specific Targets

  MMIS is principally oriented to IBM mainframes and has one of the largest IBM installations in the US in Orlando, Florida. However, MMIS claims that it is prepared to supply almost any kind of transition service for work from other computers.

- How are Midsized Services Offered Economically?

  If midsized services were required by a contract, MMIS would assume that the need would justify an economic arrangement. Not much is offered at present.

3. **Relation of Capacity Services to Other Services**

- Overall Parent Relationships

  The remote processing business makes use of the data centers and equipment which MMIS has available. It also results from some of the contracts of the parent which call for the operation of systems that have been developed to meet a client need.

- Synergies

  Experience that MMIS has gained from large federal government or commercial contracts can result in capabilities that can be used to obtain other contracts for air traffic or EDI jobs, for instance, that can involve processing work.

4. **Software**

- Software Offered (IBM, Third Party)

  Most of the software products used on jobs are developed by MMIS. Third party products could be obtained and used if desirable.

- Third Party License Arrangement

  Arrangements have been made with subcontractors to have them develop or supply software products.

- Methods for selling to/charging customers

  The cost of developing and running third party software is bundled into charges to clients.

5. **Federal Activities (Summary)**

   Just as in other Martin Marietta activities, there is interest in federal business and groups devoted to federal targets. In the case of the Information Systems Group, there are offices devoted to civil and defense business. From around 20% of business in 1992, non defense business is targeted to increase to over 60% in 1997.

B. Pricing

1. General

- How are customers charged?

  Remote processing charges are fixed price in general based on an analysis of the use of resources and services.

- Are there innovative charging arrangements?

  Not to any extent at present. Martin Marietta's charges are based mainly on its experience with government business.

- How fixed are prices?

  Prices tend to be close to fixed, although there have been some variations in what is charged for to win business. For instance, charges may not be applied to certain software.

2. Terms and Conditions

- How flexible or standardized are contracts?

  Contracts tend to be very similar although they are not fully standardized.

- How long does it take to negotiate?

  It often takes 12 to 14 months although there are some shorter ones.

- What direction are contracts going in?

  They will become somewhat more flexible since there is more commercial business. They will also be for longer periods of time.

3. Software

- Included in price or priced separately?

  Operational cost would depend on operational considerations including the time to run various software products. There could also be charges for work that was required to implement or modify software products.

C. Cost Structure

1. Hardware

- Current Versus Obsolete Technology Used?

  Technology is relatively current, but some older technology is in use.

- Lease Versus Purchase

  Much of the equipment in use has been purchased.

- Depreciation Period

  Much of it is depreciated between 5 and 7 years.

- Optimum Data Center Size

  Cannot make a determination due to the different mix of work at centers. Large centers do have economics of scale according to MMIS.

2. Personnel

- Total employees of MMIS are around 6,000.

- Relative Cost

  Near average for the industry.

- Use of Own Staff Versus Third Party

  Some of the staff taken over from clients has been utilized. Generally use own staff and not third party.

3. Maintenance (IBM versus TPM)

Use both IBM and TPM.

D. General Information

1. Organization Structure

The information services vice president has offices reporting to him that handle business development and management as well as technical operations, human resources, and a general counsel. There are also four groups devoted to handling specific projects such as Housing and Urban Development, Civil Systems and the National Test Bed.

2. Competitive Overview

- Strengths and Weaknesses

  Martin Marietta's strengths are in handling complex technical projects, but it has a weakness in terms of the limited work that it has done in the commercial field.

- Company's Perception of Itself

  Martin Marietta feels that it has considerable technical competence in areas such as image processing, process re-engineering, life cycle modeling, rapid prototyping, computer aided software tools and other areas of technical importance. Federal orientation can make significant expansion into the commercial market difficult.

- Overall Strategy

  The company plans on using its technical strengths to move into commercial areas. The company will be trying to select companies and needs that represent value added opportunities for the exploitation of its capabilities.

- Future Directions

  Investigate and select more commercial targets where the capabilities of Martin Marietta will be of interest.

E. Sales and Marketing

1. Organization and Structure

As described in the prior section, there are business units devoted to various market segments located at Martin Marietta offices. These units and the business development function have direct sales forces to cover the market segments of interest.

In regard to coverage, Martin Marietta is attempting to respond to nationwide opportunities, but its combination of offices and presently selected markets dictate what can be effectively covered.

2. Focus (Geography, Industry Platform, Etc.)

Business has been chiefly focused on federal, defense business. Attention is now being paid to civilian agencies and some commercial business where the company's technological strengths would be of use. This has included state government.

3. Sales Process (Prospect Identification, Etc.)

Contacts are initiated by the company's offices in response to requests for bids or information or in response to situations where the company's capabilities can be used effectively. Where organizations express interest in Martin Marietta presentations or a request for proposal is developed, the company states that it will prepare a highly responsive bid. These bids are the first step in the negotiating process that can end in the use of the company's capacity services.

SHL, Systemhouse

A Services Offered

1. Overview

- Timesharing Offerings

  SHL has remote processing business although its business emphasis is on SI and outsourcing business resulting from SI. One outsourcing center that handles remote processing business including computing resources and programming support for the U.S. Treasury is located in Houston.

- Dedicated Processor Offerings

  Most of SHL's dedicated processor contracts involve a set of hardware, telecommunications and systems software capabilities that SHL is providing to support specific customer applications. These include a center to support a group of hospitals and processing services to support the business applications of 3 aerospace divisions of a U.S. manufacturer.

- Differentiation with Advantis

  SHL projects the image of handling more than processing services. It handles systems software, programming support, consulting and network services for clients. Many of the projects that result in processing work also require systems development or SI. However, SHL is also prospecting for work that is essentially processing.

- Importance of Geographic Distance

  SHL is ready to compete for contracts at any location and will be innovative in terms of acquiring or setting up centers. The center in Houston was acquired from another company to respond to possible opportunities, and operations from PA were moved there to help support it.

2. Transition Services

- Specific Targets

  SHL is willing to bid for IBM mainframe, mid-range (DEC, IBM, HP or other) and other business. The emphasis is on solving problems for clients rather than equipment involved.

- How are Midsized Services Offered Economically?

  Since the emphasis is on solving problems, SHL feels that it can obtain contracts for service that will cover costs. This has been done, but there is not much work of this type underway, at present.

3. **Relation of Capacity Services to Other Services**

- Overall Parent Relationships

  SHL is looking for opportunities for SI contracts that may or may not involve remote processing. When opportunities arise, particularly for large scale services, SHL responds rapidly.

- Synergies

  SHL has found opportunities to engage in remote processing in a number of cases as a result of the company's ability to develop solutions to the business problems of prospects.

4. **Software**

- Software Offered (IBM, Third Party)

  Much of the application software utilized in processing contracts has been developed by SHL for its clients. System software products of hardware vendors have also been offered.

- Third Party License Arrangement

  When necessary, SHL has obtained licensing arrangements for some third party software products such as DBMS products or accounting software products.

- Methods for selling to/charging customers

  When solutions are proposed that use software products of various parties, SHL suggests the arrangements that will be used for the software products.

5. **Federal Activities (Summary)**

   Revenues from the US federal government have accounted for around 5% of SHL revenues in the recent past, and much more about five years ago. In 1991, a contract from the Postal Service for $270 million over an 11 year period was awarded. A relatively small amount of systems operations work is involved in the Postal Service and other federal contracts. The major focus of these jobs is on systems integration work.

B. Pricing

1. General

- How are customers charged?

  SHL charges some clients for systems operations and processing work on a fixed price basis and some on a use of resources basis that reflects utilization as well as the total equipment involved.

- Are there innovative charging arrangements?

  SHL states that they have negotiated innovative arrangements in order to win contracts but will not provide details. INPUT believes the innovation in charging for processing work is offset by charges for other development work.

- How fixed are prices?

  Some clients have contracts with standard types of pricing that are relatively fixed, but others are priced on bases that can't be compared (i.e., where SI and processing are bundled).

2. Terms and Conditions

- How flexible or standardized are contracts?

  Overall, SHL is very flexible although they can present very standardized types of contracts for systems operation work for government bodies or for situations that involve principally remote processing work such as that done for Spectrum Healthcare or Native American Consulting, Inc.

- How long does it take to negotiate?

  Systems operations work that is part of SI contracts has been concluded in three to four months, but contracts that chiefly involve systems operations work can take much longer, up to 10 or 12 months.

- What direction are contracts going in?

  Contracts are for longer periods of time on the average. Systems operations services are also apt to involve more capabilities such as network management and desktop services as well as operation of applications and platforms.

3. Software

- Included in price or priced separately?

  Pricing for systems software is generally included in the price, and in some contracts where the application software systems are supplied by the client, the charge for operating and supporting the application software is included in the operational charges. Where application software products are developed by SHL, there could be separate charges for operation of these products.

C. Cost Structure

1. Hardware

- Current Versus Obsolete Technology Used?

  Most of the equipment that is involved in SHL SI contracts is current technology, but some of the systems operations and processing contracts has involved the use of equipment that is older, perhaps a generation older in a few instances.

- Lease Versus Purchase

  Most of the equipment in use in processing services has been acquired by SHL.

- Depreciation Period

  Acquired equipment is depreciated over periods of 4 to 5 years for older equipment and for up to 7 years on newer equipment.

- Optimum Data Center Size

  Since there are many different types of processing services and clients, there is no optimum size for SHL.

2. Personnel

The number of personnel involved in processing could not be obtained.

- Relative Cost

  SHL pays below average according to contacts in the firm involved with systems operations assignments.

- Use of Own Staff Versus Third Party

  Many of the processing jobs involve running newly developed work such as at Spectrum Healthcare where SHL staff is used. In situations such as at First City Trust, some of the staff transferred from clients was used. Third party is generally not relied upon.

3. Maintenance (IBM versus TPM)

SHL uses TPM in many situations and IBM in some cases.

D. General Information

1. Organization Structure

SHL has organizational offices devoted to Strategic Market Services, Strategic Technology Services, and Computing and Network Services, all of which report to corporate management. The first of these is devoted to industry markets of SHL. The second is devoted to the network capabilities, methods and alliances that SHL utilizes to serve clients. The third is in charge of the operational offices and facilities in the countries where SHL offers services as well as all outsourcing and systems operations services.

2. Competitive Overview

- Strengths and Weaknesses

  In systems operations work, one of the strengths of SHL is its ability to participate in SI or other work that can lead to processing contracts. Other strengths are aggressive pricing and the ability to deal with complex equipment situations such as networks and client/server technology connected to mainframes or minis where support services as well as computer operations will be required. There could be weaknesses in covering costs in some bids as well as a dilution of strength in covering a variety of needs.

- Company's Perception of Itself

  SHL feels that it is a leader in customizing the application of new IT to meet client problems. It also feels that customers look to SHL to provide a unique range of services and re-engineer their business processes when necessary to take advantage of IT.

- Overall Strategy

  Emphasize that SHL has the technological knowledge and methodology to meet all types of business needs in regard to the use of IT.

- Future Directions

  SHL is actively engaged in being on the leading edge of the deployment of client/server technology and open systems.

E. Sales and Marketing

1. Organization and Structure

Sales are carried out from regional offices through direct sales activities aimed at prospects for systems operations and processing services as well as through sales activities aimed at SI contracts that could include systems operations work,

2. Focus (Geography, Industry Platform, Etc.)

Sales in the US are carried on from about 10 regional offices. There are also regional offices in Mexico, South America, Canada and other countries. SHL would not feel limited in regard to industry or platform in regard to SI, systems operations, or processing opportunities.

3. Sales Process (Prospect Identification, Etc.)

SHL carries out prospecting for all services from its regional offices. Some prospecting is devoted to follow up from contacts as well as investigation of opportunities to submit bids. One of the prospecting activities is trying to develop interest in a presentation where SHL can discuss its strength in methodology and technology. In all sales activities, SHL focuses upon its ability to submit highly competitive bids.

Litton Computer Services

A Services Offered

1. Overview

- Timesharing Offerings

  70% of the business of Litton Computer Services of about $100 million is from non-captive offerings, and 50% of this non-captive business is in processing services. About $18 million of the processing business is in shared processing services, and $17 million is in dedicated processing. LCS also provides SI and professional services.

- Dedicated processing is a mode of service from LCS centers in which capabilities are devoted to a specific customer. Specific contract awards in the past have also called for systems operations at client sites.

- Differentiation with Advantis

  A wide range of professional services is offered to clients, and work is primarily sought that will involve both the use of professional services and processing.

- Importance of Geographic Distance

  Network capabilities including a T-1 backbone support distant users, however, many of LCS clients including federal government customers are near the 7 LCS processing locations. Four of these sites support air force work, one is in Washington, DC supporting federal government work, and the other two are the Eastern and Western regional centers in Reston, VA and Woodland Hills, CA.

2. Transition Services

- Specific Targets

  LCS offers IBM mainframe computing environments primarily although front end processors and customized interfaces provide access to any customer workstations.

- How are midsized services provided economically?

  Midsized services such as the use of Tandem computers in some military systems is arranged for by the contract which ensures profitable midsized services.

3. **Relation of Capacity Services to Other Services**

- Overall Parent Relationship

  30% of services including processing, professional services and SI are provided to internal, Litton groups. The professional services and SI capabilities were originally developed to fulfill military contracts.

- Synergies

  The work which has been undertaken on military contracts including use of systems engineering, modeling and simulation, integration, CASE, client/server technology, optical disk equipment, and other areas of IT are useful in obtaining contracts with the government and commercial organizations to develop application systems and provide operational support for them.

4. **Software**

- Software offered (IBM, third party)

  LCS makes use of its own as well as IBM and third party software products. LCS has an extensive library of tools, DBMS, financial software products and application products for health care, manufacturing and other industries.

- Third Party License Arrangements

  LCS aids clients by negotiating with third party vendors to obtain software products that would be needed to meet systems objectives.

- Methods for Selling to/Charging Customers

  Third party software products are arranged for and incorporated into LCS charges.

5. **Federal Activities (Summary)**

   About 50% of non captive work is for the federal government. This includes development as well as processing work. Litton has been a government contractor for over 30 years and has been a major contributor to sophisticated air force systems for over 20 years. LCS is currently the prime contractor for the US Air Force Reliability and Maintainability Information System (REMIS).

B. Pricing

1. General

- How are Customers Charged?

  Charges for shared or dedicated processing are almost entirely fixed price arrangements for use of specified resources both in federal government and commercial situations.

- Are there innovative charging arrangements?

  Charging arrangements are not innovative in general.

- How fixed are prices?

  Relatively fixed

2. Terms and Conditions

- How flexible or standardized are contracts?

  Contracts are almost all standard. The heavy involvement of LCS with military contracts has been a strong influence in using standard contracts.

- How long does it take to negotiate?

  Three or four months to over a year.

- What direction are contracts going in?

  Both military and commercial contracts are for longer periods of time. Also, there is pressure to conclude more flexible contracts in terms of the services involved and pricing arrangements.

3. Software

- Included in the price or priced separately?

  Generally, included in the price.

C. Cost Structure

1. Hardware

- Current versus obsolete technology used?

  Technology includes latest IBM mainframe units (E/S 9121-320) as well as older 3090s (600J and 600S).

- Lease versus Purchase

  Generally purchased.

- Depreciation period

  7 years. Shorter periods under consideration.

- Optimum Data Center Size

  Have recently consolidated CA centers. Larger centers offer chances for more economy according to LCS.

2. Personnel

1000 who handle all LCS work including captive work and SI and professional services contracts. About 300 handle processing work or have responsibilities associated with processing.

- Relative Cost

  About average according to LCS.

- Use of own staff versus third party

  Tend to use own staff

3. Maintenance (IBM versus TPM)

IBM handles much if not all.

D. General Information

1. Organization Structure

LCS is a division of Litton Industries with sales, industry application, systems engineering, technical support, data center operation, customer support, contract administration and financial units.

2. Competitive Overview

- Strengths and Weaknesses

  Strengths include experience in processing business, continuing federal business and technical capabilities. There is a recognized weakness in not being able to be as flexible as newer companies in the processing business such as Genix or SHL.

- Company's Perception of Itself

  LCS views itself as a vendor of a range of information technology services including processing that has both business and technical competence based on lengthy experience in the IT business. LCS does not perceive itself as mainly a competitor for processing business.

- Overall Strategy

  Seek government and commercial situations where the resources of LCS can be used to advantage. These could include contracts to develop systems that would require processing as well as opportunities to offer available processing resources and software products together with technical assistance to meet prospect needs.

- Future Directions

  Will continue to improve technical capabilities to meet new IT needs. Will also explore more commercial opportunities to exploit capabilities such as imaging and extensive network service capabilities.

E. Sales and Marketing

1. Organization and Structure

Direct sales activities for LCS are carried on from over 10 locations in the US including locations supporting military contracts.

2. Focus (Geography, Industry, Platform, Etc.)

Sales work is carried on throughout the country, but particularly in the Washington, DC area and in CA near regional offices. Business is particularly sought from federal, manufacturing and retail chains based on past experience and available software products. IBM mainframe contracts are also of greatest interest although LCS would like to find opportunities to use its development, network, front end and other capabilities together with mainframe processing.

3. Sales Process

Direct sales work is engaged in with likely prospects as well as in response to contacts from past clients or other organizations. LCS sales personnel will try to scope the needs and objectives of prospects with the aid of technical support personnel. Qualified or likely prospects are encouraged to visit LCS processing sites and have presentation on LCS capabilities. Proposals will be developed in response to RFP's or to the prospect's needs. Sales management will work with sales representatives to attempt to close situations.